

What is claimed is:

1. A miniaturized to the electro-dynamic sound transducer, wherein the sound transducer comprises:

a housing of deep drawn sheet metal;

a magnet system comprising a magnet;

a diaphragm provided with a coil;

wires extending from the coil to contacts;

wherein the housing has an outer diameter of maximally 20 mm;

wherein the housing is comprised of thin sheet steel having an average thickness of maximally 0.2 mm;

wherein the magnet system has a lower pole piece and an upper pole piece;

wherein the upper and lower pole pieces are comprised of sheet steel having a thickness of at least 1.5 times an average thickness of the bottom of the housing.

2. The transducer according to claim 1, wherein the upper and lower pole pieces have a thickness of at least 1.5 times the average thickness of the bottom of the housing.

3. The transducer according to claim 2, wherein the upper and lower pole pieces have a thickness of at least 2 times the average thickness of the bottom of the housing

4. The transducer according to claim 3, wherein the upper and lower pole pieces have a thickness of at least 3 times the average thickness of the bottom of the housing

5. The transducer according to claim 1, wherein the lower pole piece is part of a magnet pot whose peripheral area extends at least substantially to an upper surface of the upper pole piece.

6. The transducer according to claim 5, wherein the lower pole piece is a monolithic part of the magnet pot.

7. The transducer according to claim 5, wherein a wall thickness of the magnet pot is at least 1.5 times the average thickness of the bottom of the housing.

8. The transducer according to claim 7, wherein the wall thickness of the magnet pot is at least 2 times the average thickness of the bottom of the housing.

9. The transducer according to claim 8, wherein the wall thickness of the magnet pot is at least 3 times the average thickness of the bottom of the housing.

10. A method for manufacturing a transducer according to claim 1, the method comprising the steps of:

inserting a lower pole piece like a lost core into a mold for deep drawing;

deep drawing sheet metal in the mold for deep drawing to form the housing of the transducer and secure the lower pole piece in the housing.

11. A method for manufacturing a transducer according to claim 3, the method comprising the steps of:

inserting a magnet pot like a lost core into a mold for deep drawing;

deep drawing sheet metal in the mold for deep drawing to form the housing of the transducer and secure the magnet pot in the housing.